**Family Resemblances Demonstration**

The groups in the periodic table are also called chemical families. Chemical families share some characteristics. You are going to observe the reactivity of elements in the alkali metal and alkaline earth metal families and record your observations in the table below.

**Table 1:** *Observations of Reactivity of Alkali Metal & Alkaline Earth*

*Metal Families in Water*

|  |  |  |
| --- | --- | --- |
| **Metal** | **Appearance** | **Observations During Reaction with Water** |
| Na |  |  |
| K |  |  |
| Mg (cold water) |  |  |
| Mg (hot water) |  |  |
| Ca |  |  |

**Questions**

1. Explain what happens when alkali metals are added to water.

2. Explain what happens when alkaline earth metals are added to water.

3. Compare the reactivity of alkali metals to alkaline earth metals. Which group is more reactive?

4. Predict what will happen when Rb, Cs and Fr are added to water.

5. Predict what will happen when Sr and Ba are added to water.